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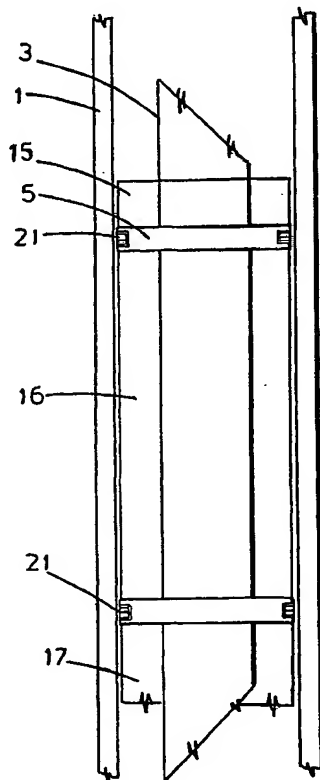
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[Continued on next page]

(54) Title: **SEALING METHOD AND APPARATUS**

(57) Abstract: A method and apparatus for forming a plug in a passageway. The apparatus comprises a carrier which in use is lowered into the passageway, the carrier comprising an elongate body (3) of a material resistant to creep which supports at least two spaced apart portions (5) that are a sliding fit in the well (1) such that a gap is formed between each of the portions and the passageway. A body of material (15, 16, 17) the melting point of which is higher than the temperature within the passageway and which expands as it solidifies is supported on the carrier. A heating device is provided for melting the body of material such that the melted material fills a space defined between the first and second portions. The carrier is cooled preferentially to ensure that the molten material solidifies rapidly adjacent the two spaced apart portions, thereby resisting flow of the material as it solidifies past the spaced apart portions. Means (21) are provided to obstruct the gaps formed between the portions and the passageway; the obstructing means being displaced into the gaps as a result of melting of the body of material or as a result of any creep of material after it has been melted and solidified.



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# INTERNATIONAL SEARCH REPORT

International application No  
PCT/GB 03/01293

**A. CLASSIFICATION OF SUBJECT MATTER**  
IPC 7 E21B33/134 E21B33/12

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
IPC 7 E21B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 2 191 783 A (WELLS WALTER T) 27 February 1940 (1940-02-27) page 1, right-hand column, line 6 - line 19	19-22
A	column 2, line 14 - line 37; figures 1-4	1
Y	US 2 298 129 A (IRONS CARROLL R) 6 October 1942 (1942-10-06)	19-22
A	page 2, right-hand column, line 39 - line 54	1
A	US 2 942 668 A (MALY GEORGE P ET AL) 28 June 1960 (1960-06-28) page 3, line 6 - page 3, line 22; figure 4	1, 19
A	US 2 363 269 A (MARCEL SCHLUMBERGER) 21 November 1944 (1944-11-21) the whole document	1, 19

☐ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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Information on patent family members

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 2191783	A	27-02-1940	NONE	
US 2298129	A	06-10-1942	NONE	
US 2942668	A	28-06-1960	NONE	
US 2363269	A	21-11-1944	NONE	